STATE OF SOUTH DAKOTA COUNTY OF PENNINGTON	*	
CHARLES RUSSELL RHINES *Petitioner,*	*	IN CIRCUIT COURT SEVENTH JUDICIAL CIRCUIT CIV. 02-924
vs.	*	
DOUGLAS WEBER, Warden, South Dakota State Penitentiary, *Respondent.*	*	TRIAL BRIEF RE: PETITIONER'S METHOD OF EXECUTION CLAIMS

Respondent Douglas Weber, by and through his counsel Paul S. Swedlund, Assistant Attorney General for the State of South Dakota, hereby files this trial brief on Charles Russell Rhines' challenges to the state's execution protocol.

INTRODUCTION

Rhines challenges the state's method of execution protocol as written and as implemented. This brief consolidates prior arguments and authorities made in respondent's initial motion to dismiss or for summary judgment with new evidence developed in this case and the *Moeller* litigation since that time. Because the state's protocol is substantially similar to, indeed more protective than, the one approved by the United States Supreme Court in *Baze v. Rees*, 553 U.S. 35, 61, 128 S.Ct. 1520, 1537 (2008), respondent is entitled to judgment in this case.

A. Standards For Adjudicating Method Of Execution Challenges

Adjudication of a lethal injection method of execution case starts with *Baze,* which ruled that lethal injection protocols are constitutional so long as they do not present a "substantial" or "objectively intolerable" risk of "severe" and "unnecessary" pain. *Baze,* 553 U.S. at 61, 67, 128 S.Ct. at 1537, 1540. Applying this standard, the *Baze* court approved Kentucky's lethal injection protocol because it contained detailed safeguards against anesthetic maladministration. BAZE PROTOCOL, Exhibit 1.

In a passage addressing future challenges to lethal injection protocols adopted by other states, the Court stated that "a state with a lethal injection protocol substantially similar to [Kentucky's] . . . would not create a substantial risk of pain rising to the level of an Eighth Amendment violation." *Clemons v. Crawford,* 585 F.3d 1119, 1126 (8th Cir. 2009); *Baze,* 553 U.S. at 61, 128 S.Ct. at 1537.

With the detailed guidance provided by *Baze,* states, including South Dakota, adopted execution protocols "substantially similar" to Kentucky's, with the result that "following *Baze,* no federal appellate court has invalidated a lethal injection protocol under the Eighth Amendment." *Cooey v. Strickland,* 589 F.3d 210, 221 (6th Cir. 2009); *Nooner v. Norris,* 594 F.3d 592, 596 (8th Cir. 2010)(upholding Arkansas lethal injection protocol modeled on Kentucky's);

ERM A.12.B, Exhibit 2; WEBER PROTOCOL AFFIDAVIT at ¶¶ 11-14, Exhibit 3 (South Dakota's lethal injection protocol modeled on Kentucky's).

The 8th Circuit Court of Appeals has upheld two lethal injection protocols against inmate challenges because they were substantially similar to Kentucky's. See *Nooner,* 594 F.3d at 596, 608; *Clemons v. Crawford,* 585 F.3d 1119, 1124 (8th Cir. 2007). In *Clemons,* the court affirmed the district court's dismissal of eight inmates' challenges to Missouri's post-*Baze* lethal injection protocol. After meticulously comparing the safeguards in Missouri's lethal injection protocol with *Baze,* the *Clemons* court found Missouri's protocol "constitutional on its face" because its "safeguards against the risk of maladministration [were] similar to, and in many ways more stringent than, Kentucky's." *Clemons,* 585 F.3d at 1125, 1126.

Likewise, in *Nooner,* the court examined Arkansas' lethal injection protocol for whether it contained the safeguards that the *Baze* court deemed "important." Finding that Arkansas' lethal injection protocol was "substantially similar to - and perhaps even more thorough than – the Kentucky protocol upheld by the Supreme Court in *Baze,"* the *Nooner* court affirmed the district court's entry of summary judgment in favor of the state's department of corrections. *Nooner,* 594 F.3d at 608.

Clemons and *Nooner* thus affirm that trial courts may properly enter judgment in favor of a state who's challenged lethal injection protocol is substantially similar to Kentucky's "on its face." *Clemons,* 585 F.3d at 1125;

Nooner, 594 F.3d at 608. The constitutional inquiry is "not concerned with a risk of accident," but rather with whether "the written protocol inherently imposes a constitutionally significant risk of pain." *Taylor v. Crawford*, 487 F.3d 1072, 1080 (8th Cir. 2007); *Baze* 553 U.S. at 49, 128 S.Ct. at 1531. Because, as discussed below, South Dakota's protocol is substantially similar to Kentucky's, and because Rhines' challenges are all founded on a risk of accident rather than inherent risk, it is appropriate to enter judgment in respondent's favor with regard to Rhines' method of execution claims.

B. South Dakota's Lethal Injection Protocol Is Substantially Similar To *Baze*

After the *Baze* decision, the warden consulted with legal counsel to determine what changes should be made to the state's existing protocol. The DOC revised its existing protocol in August of 2010 to incorporate further safeguards endorsed by the *Baze* decision. WEBER PROTOCOL AFFIDAVIT at ¶¶ 11-14, Exhibit 3. This revised protocol used the same three-drug protocol approved in *Baze*.

In response to emerging judicial acceptance of pentobarbital as an execution anesthetic, the warden again modified the protocol in October of 2011 to provide for execution via a one-drug, pentobarbital protocol for all prospective executions, including Rhines'. ERM A.12.B(H), Exhibit 2; WEBER PROTOCOL AFFIDAVIT at ¶ 14, Exhibit 2. South Dakota thereby joined Ohio and Washington in moving to a one-drug protocol. Since then, Idaho,

Oklahoma, and Pennsylvania have also adopted a one-drug, pentobarbital protocol. After the executions of Eric Donald Robert and Donald Eugene Moeller in October 2012, the warden modified the protocol slightly to provide inmates with express assurance that any compounded execution drugs would be prepared according to the governing standards of the United States Pharmacopeia (USP).

The November 2012 protocol retains *Baze's* safeguards for the proper administration of the anesthetic. ERM A.12.B(D)(10), Exhibit 2. Those are:

1. The execution is performed under the oversight and command of the warden, who, by statute and policy, is charged with numerous duties to ensure a humane execution. WEBER PROTOCOL AFFIDAVIT at ¶ 2, Exhibit 3.

2. The warden assures that two complete sets of pentobarbital syringes are prepared for the execution. ERM A.12.B(A)(3).

3. Ambulance staff is on standby to attempt to resuscitate the inmate in the event execution is stayed for any reason after commencement. They are to be equipped with advanced life support capabilities, including a heart defibrillator and such supplies and equipment as would be needed to attempt to revive an individual who has been injected with pentobarbital. ERM A.12.B(A)(5).

4. Execution team members must be qualified to carry out their functions. Persons responsible for inserting the needles and establishing IV lines must be "trained to perform venipuncture and to administer intravenous injections." To meet qualifications, the persons who "connect, monitor, and maintain intravenous lines" must be "certified or licensed and have at least two (2) years professional experience" as either a "medical or osteopathic physician, physician assistant, registered nurse, certified medical assistant, licensed practical nurse, phlebotomist, paramedic, emergency medical technician, or military corpsman." ERM A.12.B(B)(1).

5. The person responsible for mixing the drugs, preparing the syringes, and administering the injections must "demonstrate proficiency through relevant training and two years' experience in the administration of drugs by intravenous injection; preparation of syringes for such administration; and mixing and preparation of drugs for such administration." ERM A.12.B(B)(2).

6. The two sets of chemicals, one primary and one backup set, are clearly labeled in conspicuously-marked and sequentially-numbered syringes. ERM A.12.B(C)(3).

7. The pentobarbital is mixed or prepared in accordance with USP 797 and is thereafter maintained in accordance with manufacturer's instructions. The pentobarbital must be mixed or prepared in bright, undimmed light. ERM A.12.B(D)(3); MURDY AFFIDAVIT at ¶¶ 6, 9, 11, Exhibit 4; DEPONENT # 1 AFFIDAVIT at ¶ 1, Exhibit 5; WEBER 1OCT12 AFFIDAVIT at ¶ 9, Exhibit 6.

8. DOC staff responsible for performing the execution is required to "drill at least weekly for six to eight weeks prior to the scheduled date of execution," as well as to perform "additional drills the week of the scheduled execution" at the warden's direction. ERM A.12.B(D)(1).

9. At least one week prior to the execution, a medical provider examines the inmate and prepares a report "describing the inmate's physical condition and any medical condition of the inmate that may lead to potential problems establishing the IV site." ERM A.12.B(D)(2).

10. The protocol requires that every effort be made to ensure that no unnecessary pain is inflicted on the inmate. ERM A.12.B(D)(10).

11. The inmate is secured to the execution gurney in such a position that "at all times" his "head and face are visible to the warden and to those in the chemical room." ERM A.12.B(D)(9).

12. The warden ensures that the IV team establishes "two independent IV lines to the inmates veins," one for the primary set of syringes and another for the backup set. ERM A.12.B(D)(8). The lines must be secured "in such a way as to leave them visible for monitoring."

13. If the IV team "cannot secure one (1) or more sites within one (1) hour," the execution will cease and will be "scheduled for a later date during the week of the execution." ERM A.12.B(D)(11).

14. At first, the IV team will "start a saline flow and a sufficient quantity of saline solution shall be injected to confirm that the IV lines have been properly inserted and are not obstructed." ERM A.12.B(D)(12).

15. The warden stands in the execution chamber with the condemned and issues the order for the execution to proceed from there. ERM A.12.B(E)(2).

16. The executioner then administers a 5-gram dosage of pentobarbital followed by 25 grams of saline to assure the administration of the full dose. ERM A.12.B(H)(4)-(6).

17. The warden monitors the IV lines and the inmate's response to the injection over the next 15 minutes. If the person responsible for pronouncing death is not able to do so after 15 minutes, "the warden shall order a second set of chemicals to be administered." ERM A.12.B(H)(7).

18. After administration of the second 5-gram dosage of pentobarbital, "[t]he person responsible for pronouncing death shall enter the chamber and confirm death by checking the inmate's heartbeat, breathing, pulse, and pupils. ERM A.12.B(H)(10).

ERM A.12.B, Exhibit 2; *compare with Baze,* 553 U.S. at 44-46, 51, 55-56, 128 S.Ct. at 1528, 1531, 1533-34 *and* BAZE PROTOCOL, Exhibit 1.

Comparing ERM A.12.B with the *Baze* decision reveals that South Dakota's lethal injection protocol is "substantially similar" to, and in many respects more protective than, Kentucky's. South Dakota's protocol, therefore is constitutional "on its face." *Baze,* 553 U.S. at 61, 128 S.Ct. at 1537; *Clemons,* 585 F.3d at 1125, 1126. Consequently, Rhines' cannot prevail on his claim that ERM A.12.B violates the Eighth Amendment.

C. Rhines' Protocol Expert Is Not Credible

Confronted with a protocol that is constitutional on its face, Rhines claims that respondent will *implement* the protocol in an unconstitutional manner, as allegedly demonstrated by alleged past protocol "deviations" and the drugs and personnel selected for the Page, Robert, and Moeller executions. Before addressing reaching the substance of these allegations, it is worth taking the time to examine the credibility and qualifications of the "expert" who is behind Rhines' claims – Dr. Mark Heath.

The record shows that Dr. Heath's "expert" opinions are of no value to this case (1) because he lacks objectivity, (2) because his "methodology" is nothing but speculation, and (3) because his opinions counsel this court to adopt protections that the *Baze* court rejected.

In *Eckelkamp v. Beste,* 315 F.3d 863 (8th Cir. 2002), the court affirmed judgment in favor of a defendant where the plaintiff's expert's report was "of no value." *Eckelkamp,* 315 F.3d at 868. The *Eckelkamp* court ruled that a trial court may apply *Daubert* principles to "determine whether the expert's methodology is reliable and can reasonably be applied to the facts of the case." *Eckelkamp,* 315 F.3d at 868; *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579 (1993); F.R.E. 702. Having determined that the plaintiff's expert's report was "fundamentally unsupported and therefore of no assistance to the trier of fact," the *Eckelkamp* court determined that the trial court properly entered judgment in defendant's favor. *Eckelkamp,* 315 F.3d at 868.

In arriving at its decision, the *Eckelkamp* court cited to *Kalamazoo River Study Group v. Rockwell Int'l Corp.* 171 F.3d 1065 (6th Cir. 1999). Citing *Daubert*, the *Kalamazoo* court reasoned that its function was to "look beyond the [expert's] conclusions to determine whether the expert testimony rests on a reliable foundation." Thus, the *Kalamazoo* court examined the plaintiff's expert's opinions and found that their grounding in "speculation, conjecture, and possibility" made the resulting report "scientifically unreliable." At bottom, the *Kalamazoo* expert's "entire theory of liability" was based on "assumption[s,] . . . speculation and possibility." In the face of such a wide "analytical gap between the evidence presented and the inferences . . . drawn" by plaintiff's expert, the *Kalamazoo* court affirmed the trial court's decision to exclude the expert's report from its determination to award judgment in defendant's favor. *Kalamazoo,* 171 F.3d at 1072-73.

The *Kalamazoo* opinion's criticisms of "scientifically unreliable" expert reports based on "speculation and possibility" could easily have been written with Dr. Heath's report in mind.

1. Dr. Heath's "Methodology" Consists Of Nothing More Than Speculation

Dr. Heath's methodology in this case consists of nothing more than speculating on the possibility that mishaps like infiltration and "blowout" *may* occur during an execution. Dr. Heath's methodology is not helpful because he never opines that such mishaps occur with any certainty or reliability when an

execution is performed by qualified personnel. In *Baze* terms, Dr. Heath never opines that the risks of these particular mishaps under South Dakota's protocol are *substantial*. To the contrary, Dr. Heath himself called the risk of mishap "unlikely."

Dr. Heath is no absent-minded professor; he is a smart man of science who knows that propositions about what "may" occur unaccompanied by rates of certainty or reliability are not generally accepted according to scientific standards. How do we know what Dr. Heath knows? Because, when cross-examined about a statement in a medical journal that IV infiltration *may* cause pain (which, if true, would diminish the risk of anesthetic awareness in executions because inmates could alert personnel to pain sensations at the IV site), Dr. Heath testified as follows.

> Q [DEFENSE COUNSEL]: Now in the first paragraph, the sentence starting with accidental extravenous injection may cause pain . . . Do you agree with that sentence?
>
> * * *
>
> A: Thanks. It says *may* cause pain, I think that's a brilliant example of it bolstering the opinion that it *may* cause pain. It certainly fails to say that it would, with certainty or reliability, cause pain.

HEATH *SAAR* TESTIMONY at 103:20-104:3, excerpt attached as Exhibit 7 (emphasis on *may* added). There it is, in his own words. Dr. Heath himself criticizes as unscientific projections of what *may* occur that do not identify the "certainty" or "reliability" of their occurring.

Dr. Heath may think that speculating about what "may" go wrong is a "brilliant" technique to "bolster" his anti-death penalty advocacy, but such

gamesmanship has no place in a court of law. Why? Because Dr. Heath's resulting opinions lack foundation, making them of no use to the court. The witness stand is not a soapbox. That being the case, Dr. Heath's testimony does not provide grounds for judgment in Rhines' favor because he never opines that there is a "substantial" risk of mishap under the protocol that would result in "severe" pain. *Kalamazoo,* 171 F.3d at 1072-73.

2. Dr. Heath's "Medical" Opinions Consist Of Arguing That *Baze* Was Wrongly Decided

Dr. Heath actually functions more as a constitutional commentator than a medical expert. Dr. Heath's medical opinions consist of telling this court that *Baze* got it all wrong. For example, (1) Dr. Heath advises the court that IV Team personnel need to have higher qualifications than the qualifications thresholds set by *Baze,* (2) Dr. Heath advises the court that *Baze's* threshold qualifications for IV Team members are not sufficient to protect against maladministration while *Baze* says otherwise; (3) Dr. Heath advises the court that it should not countenance remote delivery of the drugs from the control room even though *Baze* found no fault with such an arrangement, *etc.* HEATH 26JUL11 AFFIDAVIT at ¶¶ 3(c), 11(i)-(k), 15(a)-(c); HEATH 13SEP2 AFFIDAVIT.

Dr. Heath's expert "opinion" is simply that *Baze's* safeguards are insufficient. Superficially, his "opinions" might lead one to question whether *Baze* overlooked something worthy of further constitutional consideration, except that Dr. Heath *served as the plaintiff's expert in Baze!* The United States

Supreme Court heard what Dr. Heath has to say about "infiltration" and "blowout" and has rejected his brand of alarmism. According to *Baze*, "[t]he qualifications of the IV team . . . substantially reduce the risk of IV infiltration." These threshold qualifications, in combination with "the presence of the warden and deputy warden in the execution chamber with the prisoner" watching "for signs of IV problems, including infiltration" are the only constitutionally required safeguards against anesthetic administration. *Baze,* 553 U.S. at 56, 128 S.Ct. at 1534. Only Justice Ginsburg's dissenting opinion, which was joined by only one other justice, felt that Kentucky's protocol failed to adequately protect against infiltration and blowout. *Baze,* 553 U.S. at 122, 128 S.Ct. at 1572. *Baze* has addressed and rejected all of the precautions Dr. Heath claims are indispensable to protecting Rhines and other condemned inmates from an unconstitutionally "agonizing death process." In the terrain of lethal injection law, Dr. Heath is out in the wilderness and, consequently, his opinions are of no value to this court.

3. Dr. Heath Is Not An Objective Medical Expert Whose Opinions Are Offered To Assist The Court

Dr. Heath is a death penalty opponent.[1] In and of itself, such a belief does not disqualify him as an expert so long as his scientific objectivity remains intact. However, his testimony in this and other cases reveals that his moral

[1] *Evans v. Saar,* CIV L-06-149 (D.Md. 2006) at 74:1-76:5, Exhibit 7; *Taylor v. Crawford,* CV 05-4173 (W.D.Mo. 2006) at 11-12, 116, Exhibit 8.

opposition to the death penalty colors his testimony in ways that call his scientific objectivity into question.

For example, it is reasonable to ask whether one who characterizes a state's protocol, as Dr. Heath did, as "vacuous verbiage that in no way protects the condemned inmate from being subjected to butchery at the hands of incompetent personnel" is incensed beyond the ability to assist this court with objective, reasoned testimony. *Nooner v. Norris,* 2008 WL 3211290 (E.D.Ark.). The circuit court later upheld the "vacuous" protocol in spite of Dr. Heath's vehement opposition. *Nooner*, 594 F.3d at 596.

Ultimately, it is not the vehemence of Dr. Heath's beliefs that calls his objectivity and reliability into question, it is his willful disregard of the legal standards to which his testimony is supposed to be addressed, his apparent willingness to *say anything* (even if he contradicts himself) to attack a state's lethal injection protocol, his cavalier opinionating on matters outside his area of expertise, and his lack of general acceptance that undermine his credibility.

First, Dr. Heath has devised a tactic to assure that he will never have to concede that any state's lethal injection protocol satisfies constitutional standards – he simply ignores constitutional standards. Instead, Dr. Heath bases his testimony on the proposition that lethal injection is a medical procedure that requires a medical standard of care.[2] But, since AMA rules and

[2] *Evans v. Saar,* CIV L-06-149 (D.Md. 2006) at 129:1-9 ("[i]n my opinion, individuals providing general anesthesia for Maryland prisoners who require surgery should not be held to a different

the Hippocratic Oath preclude physicians from participating in penalogical lethal injections, no lethal injection protocol will ever meet Dr. Heath's standards. *Cooey II,* 589 F.3d at 226-27 (physician participation is neither required by *Baze* nor is it feasible under AMA rules); *Baze,* 553 U.S. at 64-65, 128 S.Ct. at 1539 (physician participation impractical under AMA rules).

While Dr. Heath's steadfast application of medical standards of care to penalogical lethal injection cleverly positions him to oppose virtually all lethal injection protocols, he fails to appreciate that it is self-defeating. Since courts from *Baze* on down have held that lethal injection is not a medical procedure and does not require medical standards of care to be constitutional,[3] Dr. Heath's testimony is without foundation because he applies a higher standard that the constitution requires.

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or lower standard than is set forth for individuals providing general anesthesia in any other setting in Maryland. Specifically, the individuals providing general anesthesia for prisoners in Maryland should possess the experience and proficiency of anesthesiologists and/or CRNA's"), Exhibit 7; HEATH ARKANSAS AFFIDAVIT at ¶ 29 ("[i]n my opinion, individuals providing general anesthesia in the Arkansas prisons should not be held to a different or lower standard than is set forth for individuals providing general anesthesia in any other setting in Arkansas"), Exhibit 25.

[3] *Gregg v. Georgia,* 428 U.S. 153, 173, 96 S.Ct. 2909 (1976)(constitution does not require the use of execution standards that may be medically optimal in other contexts); *Ex parte Aguilar,* 2006 WL 1412666 (Tex.Crim.App. 2006)(doctors do not ordinarily prepare fluids for injection or insert or monitor IV lines in hospital settings); *Taylor v. Crawford,* 487 F.3d 1072, 1083 (8th cir. 2007)(district court erred when it required state to have physician supervise execution); *Emmett v. Johnson,* 511 F.Supp.2d 634 (E.D.Va. 2007)(an execution by lethal injection is not a medical procedure and does not require the same standard of care as one); *Hamilton v. Jones,* 472 F.3d 814, 817 (10th Cir. 2007)(anesthetic monitoring such as is done in a surgical suite is not necessary in the execution chamber given the massive dosages of anesthetic that are administered).

Second, Dr. Heath's habit of saying anything to score rhetorical points in testimony calls his objectivity into question. For example, when a state does not have a manufacturer's package insert instructing it on how to reconstitute its sodium thiopental powder, Dr. Heath vigorously asserts that it is impossible to reconstitute the drug without those specific instructions. HEATH 26JUL11 AFFIDAVIT at ¶¶ 12(a)-(p). But when some other state that has a manufacturer's package insert for their drug assures Dr. Heath's clients that it will follow the insert's instructions when reconstituting the drug, Dr. Heath dismisses such assurances saying:

> The instructions provided in the package insert are insufficient in the execution context. Thiopental is generally packaged in 500-mg kits, and the kits are designed so that a medical professional can mix a single clinical dose of thiopental using the materials in the kit. The proposed protocol requires deviating from the instructions in the package insert, which addresses only the preparation of a standard individual dose of 500 mg or less, but does not give concrete mechanical instructions for doing so.

HEATH *CRAWFORD* AFFIDAVIT at ¶ 36, excerpt attached as Exhibit 8.

In another example of his "say anything" advocacy, Dr. Heath has touted post-mortem testing of thiopental blood levels as a reliable indicator of a state's inability to deliver sufficient anesthetic to an inmate.[4] But when a state offers

[4] *Beardslee v. Woodford,* 2005 WL 40073 (N.D.Cal.)(Heath testifies to "concern that the levels of blood toxicology reports of executed inmates . . . indicate that in some cases the sodium thiopental may have worn off prior to the administration of pancuronium bromide"); *Reid v. Johnson,* 333 F.Supp.2d 543 (E.D.Va. 2004)(Heath "asserted that the toxicology reports demonstrated that inadequate amounts of sodium thiopental had reached the inmate's body and thus, there was a possibility that the inmate may have been conscious during his execution"); *Baker v. Saar,* 402 F.Supp.2d 606 (D.Md. 2005)(Heath testified "that post-mortem evidence about the blood concentrations of sodium pentathol . . . suggests the possibility that there was insufficient anesthesia").

post-mortem blood testing as evidence of its *ability* to deliver appropriate levels of anesthetic, Dr. Heath dismisses it as unreliable because the data does not reveal "when the blood was drawn" or "where in the body it was drawn from." HEATH *SAAR* TESTIMONY at 175:5-17, Exhibit 7. Of course, the lack of draw time or body location data in the studies Dr. Heath touted to the courts did not deter him from proffering this evidence until courts, not the least of which was *Baze* itself, discredited his studies in published opinions.[5]

Dr. Heath's failure to confine his opinions to matters within his field of expertise further calls his objectivity into question. In his apparent zeal to critique South Dakota we are treated to: (1) Heath as omniscient presence over execution team members and their families ("I am not aware of any cases in which publicly named execution participants have been harmed as a result of the release of their identities," "I am not aware of any execution team members or families of team members who have been subjected to harm resulting from providing testimony"); (2) Heath on Civil Procedure ("Repeatedly it has been the case that hearing information from both past and present/future execution

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[5] *Baze*, 553 U.S. at 51, 128 U.S. at 1532 n. 2 ("because the blood samples were taken 'several hours to days after' the inmates' deaths, the postmortem concentrations of thiopental [cited by Dr. Heath] – a fat soluble compound that passively diffuses from blood into tissue – could not be relied on as accurate indicators of concentrations during life"); *Reid v. Johnson*, 333 F.Supp.2d 543 (E.D.Va. 2004)(Heath toxicology evidence disregarded because the "lack of pertinent information regarding when and how the blood was gathered renders these reports of little value as a basis for rendering an opinion based on reasonable medical certainty as to the amount of sodium thiopental that had actually reached the inmate's system . . . . In short, the sodium thiopental level found in the toxicology report for a particular inmate is not indicative of the consciousness of that inmate during his execution").

team members has been decisive in determining their suitability"); (3) Heath on OSHA Law ("An MSDS is a form or document that is provided or supplied with chemical substances. It contains important information about the chemical and physical properties of a substance, and it is important for workplace safety" "If an MSDS for Kayem thiopental is lacking then it should not be held or used by the SDDOC"); (4) Heath on Civil Discovery ("Compared with other states, the SDDOC has provided significantly less information about the procedures, personnel, and equipment that they intend to use to carry out the executions"); and, (5) Heath on Prison Security ("I cannot envision any legitimate security need for keeping the injection team in a separate room from a heavily restrained and well-guarded prisoner"). HEATH 26JUL11 AFFIDAVIT at 12(q), 13(a), 13(c), 13(h).

The ultimate proof of Dr. Heath's say-anything, anti-death penalty advocacy is found in his current resistance to a one-drug pentobarbital protocol that he previously endorsed. Back in the day when states steadfastly clung to the three-drug protocol, Dr. Heath testified that a one-drug/pentobarbital method, the preferred and most humane method to euthanize animals, was also the preferred and most humane method for executing human beings. In support of this opinion, Dr. Heath testified in *Cooey* in 2009 that Ohio's then-three-drug protocol was unconstitutional because a one-drug/pentobarbital protocol presented a more humane option.

On behalf of his condemned client, Dr. Heath testified *on direct examination* in support the one-drug/pentobarbital protocol as follows:

> Q: In your opinion, and given all that you've studied and researched and thought about this matter, can lethal injection be performed in a humane fashion.
>
> A: Absolutely, yes.
>
> Q: That's theoretically possible, then, I take?
>
> A: No. More than theory. It's a fact that animals – cats, dogs, horses, elephants – are put to sleep by using lethal injection . . . . You know, zoos also have to do euthanasia in a different, regular veterinary practice. So, we know that, for example, large primates, like gorillas, they use lethal injection. They don't call it that. They call it, you know, euthanasia. A beached whale, beached whales have to be euthanized, and they use an injection of drugs, or actually pentobarbital, a large dose of pentobarbital. And that's what is used for elephants and horses and dogs and cats. So, definitely, it can be done humanely. No human activity is perfect. So sometimes veterinarians could have a problem with an IV or whatever. That will always be the case any time you're doing lethal injection, but as humane as humanly possible, absolutely. ***Cooey v. Strickland*, 2009 WL 6686346 (S.D.Ohio 2009) at 16-17, excerpt attached as Exhibit 9.**

* * *

> Q: [I]s it necessary that the person [placing an IV catheter] be a physician, for example?
>
> A: Absolutely not.
>
> Q: Okay. And why not?

A: Because, as we all know, there are many health-care practitioners who are not physicians who are extremely good at putting in IVs. There are nurses, there are EMTs, there are physician assistants, *et cetera,* who are very good at putting in IVs. ***Cooey*, 2009 WL 6686346 at 36, Exhibit 9.**

* * *

Q: It's your understanding that [Ohio prohibits use of pancuronium bromide in animal euthanasia], is that a statutory one, or do you know?

A: I know animal shelters in Ohio are allowed to use pentobarbital, which is – you can think of pentobarbital like pentothal, except that, instead of wearing off quickly, it lasts for a very, very long time, which makes sense. You want the animal to be dead. So it makes sense to use something long-acting. They're not – animal shelters don't use anything other than [pentobarbital]. At least they are not supposed to.

Q: Could the use of one drug, such as in the euthanasia context involving animals, could that, in your opinion, be effectively used in an execution setting?

A: What works for all other vertebrate animals, all other mammals, is going to, in massive overdoses, is going to work in human beings also.

Q: Do you have any sense as a medical professional as to how long an execution would take using massive doses of sodium thiopental?

A: Which would be the same as using massive doses of some other anesthetic. Yeah.

Q: True.

A: The reason one would die in that context is going to be because of not breathing. The drug will take away the respiratory drive. And in a healthy person, I think that would take probably around ten minutes. It's very variable. You will have severe brain injury and brain death after around four minutes. And, so, a person could be considered brain dead before their heart actually stops working because their brain would have – all the neurons in their brain would have died irreparably, and that's brain death. And that's legal death also. It will take longer, probably, for the heart to stop having electrical activity.

Q: In your opinion, would the use of one drug, massive dose of sodium thiopental or some other barbiturate, take more or less time than [14 minutes].

A: If you – you know, if you give a massive dose of pentobarbital, which can be done very quickly, in all likelihood the person is going to be legally dead in less time than that. ***Cooey*, 2009 WL 6686346 at 40-41, Exhibit 9.**

* * *

Q: With the dose, massive dose, of whichever drug, sodium thiopental, pentobarbital, whichever one is used, if that is used in place of a three-drug protocol, in your opinion, the IV access issues and infiltration issues, are those problems any longer?

A: If all you're using is an anesthetic-only technique, which is what veterinarians use, the chance of causing an inhumane death is exceedingly remote. Again, you're using a drug that all it does is make you get sleepy and then make you go to sleep and then make you stop breathing and make you die. The worst that could happen is you don't get enough in right away . . . and you give more, and you give more until the person does get sleepy and until they do die. That's really the worst thing that can happen. Without – if you remove the drugs that can cause excruciating pain [pancuronium bromide and potassium chloride], there's no way of having excruciating pain . . . . [I]f you just use a massive overdose of an anesthetic, it will stop the breathing, and it will cause death, and it will not be able to cause pain, because all anesthetics do is make you go to sleep. ***Cooey*, 2009 WL 6686346 at 41, Exhibit 9.**

* * *

Q: [ON CROSS-EXAMINATION] And isn't it true that, because you're opposed to the death penalty, you don't really need any substantial evidence that inmates suffered severe pain in order to testify or render an expert opinion that there's a risk that they could?

A: That's completely untrue. Again if Ohio were to use a [one-drug/pentobarbital] veterinary standard of lethal injection, or to bring in an experienced professional who could ensure anesthetic depth when the prisoners are paralyzed and being given potassium [in the three-

> drug protocol], then there would be no litigation, or at least I would not participate in the litigation, or I would work for your side to say that I think this is a safe and humane procedure. ***Cooey*, 2009 WL 6686346 at 70, Exhibit 9.**

Dr. Heath's testimony allows this court to draw the following conclusions: (1) a one-drug/pentobarbital method of execution is humane; (2) numerous medical practitioners – nurses, EMTs, physician's assistants – are competent to set an IV catheter for the administration of a massive dose of pentobarbital; (3) the risk of an inhumane death resulting from a one-drug/pentobarbital method of execution is "exceedingly remote;" and (4) that there should "be no litigation" once a state adopts the veterinary standard of lethal injection by a one-drug/pentobarbital method.

Dr. Heath's testimony in this case in comparison to his testimony in *Cooey* shows that he is not interested in assisting this court in its solemn role in carrying out this state's capital sentence. Even after South Dakota adopts the one-drug protocol he advocated, Dr. Heath cannot concede that it is a safe and humane procedure. Instead, he adjusts his testimony to focus on the increasingly attenuated risks of mishaps like "infiltration" and "blowout" occurring so he can adhere to his death penalty abolitionist stance.

Dr. Heath's Hippocratic Oath is no excuse for not formulating medically sound and useful information for this court. Doctors dedicated to preserving life certainly have an innate aversion to taking it; but lawyers dedicated to preserving the rule of law's restraint on state power also have a like aversion to

the state taking a life. But while the law's penalty of death for crimes such as Rhines' necessitates the participation of doctors and lawyers (and state officials) in the litigation process, Dr. Heath's testimonial dissembling does not reflect due respect for this process. Simply put, if he is unwilling to help, his opinions are of no value.

Given his vehement opposition to the death penalty, his unwillingness to assist the court by addressing his testimony to applicable constitutional standards rather than inapplicable medical standards of care, his proffering of contradictory testimony in different cases as it suits the ends of his abolitionist advocacy, and his lack of restraint in offering cavalier opinions on matters beyond his expertise, Dr. Heath's opinions and testimony are unsound, unreliable, and insufficiently credible to supply grounds for judgment in Rhines' favor on his Eighth Amendment claims.

4. Dr. Heath's Expertise Has Not Received General Acceptance In State Or Federal Courts

In light of the aforementioned shortcomings in Dr. Heath's methodology and practices, it is not surprising that his testimonial offerings have not gained general (or even isolated) acceptance. Dr. Heath's CV touts the many jurisdictions in which he has testified as a witness, but he fails to mention that those jurisdictions have uniformly rejected his opinions or testimony as a basis for holding a lethal injection protocol unconstitutional, or for staying an

execution.[6] Conspicuous among the jurisdictions rejecting Dr. Heath's testimony is Kentucky, where Dr. Heath's opinion that Kentucky's protocol posed unreasonable and unnecessary risks of pain to condemned inmates was soundly rejected by the *Baze* trial court and ultimately the United States

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[6] *Durr v. Strickland,* 602 F.3d 789 (6th Cir. 2010)(Heath testimony alleging inmate suffered from allergy to anesthetic was not sufficiently convincing to warrant stay of execution); *Cooey et al. v. Strickland,* 589 F.3d 210 (6th Cir. 2009)(Heath testimony focusing on risks of improper implementation of Ohio protocol did not raise constitutionally significant concerns warranting a stay of execution); *Grayson v. Allen,* 491 F.3d 1318 (11th Cir. 2007)(Heath testimony failed to present sufficient issued to prevent dismissal of inmate's claim as untimely filed); *Taylor v. Crawford,* 487 F.3d 1072 (8th Cir. 2007)(Heath testimony failed to convince court to hold written method of execution protocol unconstitutional); *Workman v. Bredesen,* 486 F.3d 896 (6th Cir. 2007)(Heath affidavit did not establish likelihood of inmate's success on the merits of motion to suspend his execution); *Brown v. Beck,* 445 F.3d 752 (4th Cir. 2006)(Heath testimony not persuasive enough to secure injunction enjoining inmate's execution); *Cooper v. Rimmer,* 358 F.3d 655 (9th Cir. 2004)(Heath testimony failed to show that lethal injection procedure involved an unnecessary risk of unconstitutional pain or suffering as would warrant stay of execution); *Brown v. Crawford,* 408 F.3d 1027 (8th Cir. 2005)(Heath affidavit failed to convince court to stay inmate's execution); *Cooey et al. v. Strickland,* 2010 WL 1610608 (S.D.Ohio)(Heath failed to convince trial court that plaintiff Durr's alleged anesthetic allergy likely to cause pain and suffering); *Cooey et al. v. Strickland,* 2009 WL 4842393 (S.D.Ohio)(Heath testimony failed to persuade trial court of a substantial likelihood that plaintiff Biros would succeed on the merits of his claim challenging constitutionality of Ohio's lethal injection protocol as would warrant stay of execution); *Cooey et al. v. Strickland,* 610 F.Supp.2d 853 (S.D.Ohio 2009)(Heath testimony failed to demonstrate that plaintiff Biros was likely to succeed on his claim that Ohio's method of execution protocol was constitutionally flawed); *Grayson v. Allen,* 499 F.Supp.2d 1228 (M.D.Ala. 2007)(Heath testimony failed to demonstrate that inmate was entitled to a stay of execution); *Hankins v. Quarterman,* 2007 WL 959040 (N.D.Tex.)(Heath testimony "fell short of showing that the inmate was subject to an unnecessary risk of unconstitutional pain"); *Morales v. Hickman,* 415 F.Supp.2d 1037 (N.D.Cal. 2006)(despite Heath testimony, court found protocol constitutional so long as protocol was amended to include consciousness check); *Evans v. Saar,* 412 F.Supp.2d 519 (D.Md. 2006)(Heath testimony failed to establish that state's three-drug protocol constituted cruel and unusual punishment as would support inmate's motion for a TRO); *Beardslee v. Woodford,* 2005 WL 40073 (N.D.Cal.)(Heath testimony insufficient to demonstrate any reasonably possibility that inmate would be conscious after injection with sodium thiopental); *Reid v. Johnson,* 333 F.Supp.2d 543 (E.D.Va. 2004)(Heath testimony failed to establish that inmate was likely to suffer irreparable harm as a result of state's protocol for carrying out death sentence by lethal injection); *Harris v. Johnson,* 376 F.3d 414 (S.D.Tex. 2004)(reversing stay entered by trial court); *Ringo v. Lombardi,* 2011 WL 2584476 (W.D.Mo.)(finding that Heath's testimony concerning the use of non-medical personnel to push the IV and the use of drugs without a prescription failed to demonstrate that the inmate would suffer an injury in fact); *Baker v. Saar,* 402 F.Supp.2d 606 (D.Md. 2005)(Heath testimony did not warrant stay of execution); *Nooner v. Norris,* 2008 WL 3211290 (E.D.Ark. 2008)(Heath failed to convince court to stay execution); *In re: Lewis Williams,* 359 F.3d 811 (6th Cir. 2004)(inmate not entitled to stay of execution based on Heath affidavit); *Malicoat v. State,* 137 P.3d 1234 (Ct.App.Ok. 2006)(denying stay notwithstanding Heath affidavit's criticism of protocol).

Supreme Court. *Baze v. Rees,* 2005 WL 5797977 (Ky.Cir.Ct.); HEATH *BAZE* TESTIMONY EXCERPT at 177, Exhibit 10.

In *Ex parte Aguilar,* 2006 WL 1412666 (Tex.Crim.App. 2006), *unpublished,* the court applied good ol' common sense to discredit Dr. Heath's overblown concerns about Texas' protocol, concerns that mirror those he raises again with regard to South Dakota's protocol. The *Aguilar* court observed that:

> All of [Dr. Heath's concerns] are potential problems during the lethal injection protocol, just as they are potential problems during any surgical procedure. As a society, however, we do not ban surgery just because of those potential problems. We take appropriate precautions and rely upon adequate training, skill, and care in doing the job . . . . We assume that trained personnel will perform adequately and take appropriate precautions unless and until it is proven otherwise.
>
> * * *
>
> [Aguilar] complains that he "does not know what the qualifications of the 'designated staff' who must ensure the integrity of the chemicals are . . . or who actually 'prepares' the syringes for each injection." True enough, but how many surgery patients know the qualifications of the technician who draws their blood and prepares syringes for surgery? In both hospitals and prisons, the presumption is that the personnel is qualified and trained unless the opposite is shown.
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> * * *
>
> Dr. Heath suggests that the procedure should be performed by and reviewed by doctors. But there is no showing that doctors routinely prepare fluids for injection, insert or monitor IV lines in hospital surgeries. Anecdotal evidence suggests that medical technicians or nurses routinely perform these tasks.

Aguilar, 2006 WL 1412666 at 5. *Baze* enumerated what the "appropriate precautions" are in an execution setting. South Dakota has adopted those precautions. Dr. Heath's criticisms of either Texas' or South Dakota's or any state's lethal injection protocols have simply failed to earn judicial acceptance.

In closing, Dr. Heath is not a credible expert. He refuses to address his opinions to controlling legal standards. His "expertise" consists of speculating on unlikely mishaps and testifying that the *Baze* court got it all wrong. When he testifies, he dances around the question, feigning no understanding of the field in which he calls himself an expert (such as whether EMTs are qualified to set IV lines) or the meanings of a words contained in controlling standards (like the word "substantial."). Dr. Heath's testimony is not helpful to this court and it can be rejected by this court, just as it was rejected by the *Baze* court.

D. South Dakota Implements Its Protocol In A Constitutional Manner

Since Rhines cannot credibly argue that South Dakota's protocol fails to incorporate the safeguards required by *Baze,* Rhines argues instead that respondent has historically failed to implement the protocol in a constitutional manner. Specifically, Rhines claims ERM A.12.B is unconstitutional because it does not assure the selection of efficacious drugs and qualified personnel.

An examination of the record, however, reveals, that the drugs (pentobarbital) and personnel (the "poker," "pusher," and pharmacist) selected in the past have met standards required by both ERM A.12.B and *Baze.* Thus, contrary to Rhines' claims, ERM A.12.B does assure that the drugs and personnel will meet constitutional standards.

1. RESPONDENT HAS USED SAFE AND EFFECTIVE PENTOBARBITAL

Rhines relies on Dr. Sarah Sellers for his claim that the use of compounded pentobarbital in executions poses unconstitutional risks of pain. Dr. Sellers' opinions, like Dr. Heath's, lack objectivity and credibility. Indeed, her opinions are more extreme than Dr. Heath's.

Dr. Sellers instantly discredits herself with her centerpiece claim there is no way to guarantee the safety or efficacy of pentobarbital without a complete provenance for the drug back to its manufacturing origins. Dr. Sellers' theory is not only scientifically flawed, it is also contrary to Dr. Heath's testimony.

First, Dr. Sellers' purely retrospective, provenance-centric viewpoint ignores the obvious method that the state has used to ascertain the purity, potency, stability, and sterility of its execution drugs – testing. Even one of Moeller's experts conceded that respondent's pentobarbital sodium could be compounded into a solution "appropriate for lethal injection." MILLER AFFIDAVIT at ¶ V(F), excerpt attached as Exhibit 11. Post-compounding testing of pentobarbital used in the Robert and Moeller executions proved that it was, in fact, compounded into a sterile, USP-compliant injectable solution. MILLER AFFIDAVIT at ¶ V(G), Exhibit 11; MURDY AFFIDAVIT at ¶¶ 9, 11, 12, Exhibit 4; WEBER MOELLER AFFIDAVIT at ¶ 6, Exhibit 12; DEPONENT # 1 AFFIDAVIT at ¶ 1, Exhibit 5.

Second, even Dr. Heath concedes that the medical standard of care in a surgical setting does not require that a drug's provenance be traced back to its source before it may be used. Dr. Heath, like the respondent, orders the drugs he needs from a pharmacist and administers them without first investigating their provenance. Contrary to Dr. Sellers' portrayal of compounding as some murky, fringe pharmaceutical practice area, Dr. Dershwitz testified that compounded drugs are a common, generally accepted, and indispensable component of anesthetic medicine. Thus Dr. Sellers' hysteria over the state's pentobarbital's alleged "grey" provenance is unfounded.

Nevertheless, it is worth noting that the manufacturer/supplier of the state's pentobarbital is an FDA- and DEA-licensed manufacturer who purchases its active pharmaceutical ingredients only from FDA-registered manufacturers who follow cGMP. SEALED EXHIBIT A; SEALED EXHIBIT B. Bottom line, if Dr. Sellers were the least interested in the truth about the state's pentobarbital or its source, one visit to the manufacturer/supplier's web site's quality-control page (or to the FDA databanks on licensed companies for that matter) could have answered her provenance "concerns."

It would have also enlightened her on the manufacturer/supplier's FDA-compliant testing practices. The manufacturer/supplier's website informs the doctors and pharmacists who rely on their product that it obtains testing from its manufacturing sources but does not rely solely on that testing for purposes of quality checking its products. The manufacturer/supplier performs its own

battery of quality control testing on drug ingredients it purchases to assure itself and its customers that the manufacturer/supplier's product meet appropriate standards. SEALED EXHIBIT B.

The manufacturer/supplier's certificates of analysis demonstrate that the pentobarbital sodium the state has used in the past is a pharmaceutical grade product because it is 99.2% pure. Compare REDACTED CERTIFICATES OF ANALYSIS, copy attached as Exhibit 13 and SEALED EXHIBIT C, with MILLER AFFIDAVIT at ¶ III, Exhibit 11; DEPONENT # 1 AFFIDAVIT at ¶¶ 1, 2, Exhibit 5. The certificates state that they are the product of redundant testing performed by both the original manufacturer of origin and the manufacturer/supplier who sold the drug to the state.

The manufacturer/supplier's bottles are branded with the USP moniker. SEALED EXHIBIT E; MURDY AFFIDAVIT at ¶ 8, Exhibit 4. Several medical school research lab manuals direct their scientists to the state's manufacturer/supplier as a source for pharmaceutical-grade pentobarbital sodium. SEALED EXHIBIT F. According to Dr. Heath, so long as a company is subject to "the diligent oversight of the FDA," as the state's manufacturer/supplier is, doctors and pharmacists can "rely" on the company to produce "reliable and safe anesthetic" products. HEATH 13SEP12 AFFIDAVIT at ¶ III(6)(d). Even in his testimony, Dr. Heath admitted that the medical standard of care does not require an anesthesiologist to investigate and determine the provenance of a drug before it may be used in a surgical

setting. As respects its past purchases and preparations of pentobarbital sodium, the state is doing nothing more or less than what Rhines' own expert describes as sound medical practice.

2. THE "PUSHER" WAS QUALIFIED

Rhines argues that the pusher is not qualified. His argument boils down to the fact that the pusher, by his own admission, is not "a medical professional." ERM A.12.B, consistent with controlling constitutional authority, does not require the pusher to be a medical professional.

ERM A.12.B requires that the pusher have "demonstrate[d] proficiency through relevant training and two years' experience in the administration of drugs by intravenous injection." ERM A.12.B(B)(4), copy attached as Exhibit 2. These qualifications are consistent with, and even exceed, those set in *Taylor,* which held that non-medical department of corrections personnel can push the syringes under the supervision of a medical professional. *Taylor,* 487 F.3d at 1083.

The pusher's qualifications satisfy *Taylor.* The pusher is a state department of corrections employee who is responsible for assuring institutional compliance with many state and federal regulations. DEPONENT # 2 at 8/19-9/15, 16/22. In that capacity, he is accustomed to adhering to rules and guidelines.

Approximately eleven years ago, the pusher commenced several months of training to administer lethal injection drugs. DEPONENT # 2 at 18/12,

19/8. He received this training from a fellow correctional employee who was experienced in performing lethal injections. DEPONENT # 2 at 18/24. The pusher observed several executions - more than five - before being permitted to participate in one. DEPONENT # 2 at 48/10. Since first participating in an execution some ten years ago, he has performed more than 20 executions without complication, including executions using pentobarbital. DEPONENT # 2 at 112/5, 20/1, 36/8, 103/13.

When performing an execution, the pusher consults the protocol to learn the drug/s used and the concentration/s called for. DEPONENT # 2 at 29/22. He checks the drug labels and compares them with the protocol to ensure that he has the right drugs. DEPONENT # 2 at 30/2, 30/19. He would not administer a drug that was not in the protocol. DEPONENT # 2 at 77/10, 93/14. He would not participate in any execution functions that were outside his role or expertise. DEPONENT # 2 at 115/19.

Prior to loading drugs into syringes, the pusher looks at the condition of the drug to see if it has been stored properly, *i.e.* is the temperature cool if it is a drug that requires refrigeration, are the tamper seals undisturbed, is the drug solution clear (not precipitated), are sterility seals on syringes, IV tubes, *etc.* intact. DEPONENT # 2 at 25/7, 70/13, 71/14, 86/9. He is trained to detect catheter site swelling and backpressure on syringes that would suggest poor catheter flow. DEPONENT # 2 at 105/14, 106/5, 106/15, 107/4, 107/20. If he detected swelling or backpressure, he would discuss the problem

with the poker, who is a medical professional, and switch to the second line. DEPONENT # 2 at 106/23-107/1. Each time he has administered pentobarbital, the pusher has observed no signs that an inmate experienced pain; according to the pusher "[w]hen it's administered, they go to sleep and that's it." DEPONENT # 2 at 83/17. He expects to participate in drills prior to performing an execution in South Dakota. DEPONENT # 2 at 92/23. The pusher's qualifications, training, and experience meet and exceed the minimum qualifications set by ERM A.12.B and *Taylor.*

Dr Heath argues that the pusher is disqualified by virtue of his participation in the "botched" execution of Elijah Page. According to the Dr. Heath, the pusher pushed all three drugs into Page in under two minutes, in facial violation of the then-existing protocol's alleged requirement to wait two minutes between pushing the first and second drugs. The problem with Dr. Heath's "botched" execution argument is that the then-existing protocol did not require a two-minute wait as he claims.

In fact, the protocol required a wait of only "approximately two (2) minutes" in order "to assure the sodium pentothal has taken effect and the condemned is unconscious." 2007 PROTOCOL at 8, excerpt attached as Exhibit 14. The protocol's benchmark was unconsciousness, not time.

According to the available timelines, Page declined a last statement at 10:02, at which time the warden gave the signal to push the first set of drugs. PAGE EXECUTION LOG, copy attached as Exhibit 15. The pusher signaled

completion of the last injection at 10:04:50. AUDIO OPERATOR LOG, copy attached as Exhibit 16; 2007 PROTOCOL at 9, Exhibit 14. This creates a time window of 2:50 seconds in which the pusher pushed the first drug, waited, then pushed the second and third drugs.

Page was already snoring while the clock still read 10:02. AUDIO OPERATOR LOG, copy attached as Exhibit 16. This means that the benchmark of unconsciousness was met within the 59 seconds between 10:02 and 10:03. This allowed the pusher a 1:50 window of time to push the second and third drugs. According to the pusher, the three drug protocol required between two and three minutes of actual push time, depending on the inmate's health. DEPONENT # 2 at 105/9-108/13, Sealed Exhibit H.

Given that Page was a healthy 23-year-old, it is reasonable to expect that the total push time was two minutes, or even slightly less. WEBER 1OCT12 AFFIDAVIT at ¶ 7, Exhibit 6. This allowed for between a 50 and 60 second wait after pushing the first drug to reach the unconsciousness benchmark. These facts prove two things: (1) that the pusher did not deviate from a "mandatory" two minute wait period during the Page execution, and (2) he did not push the drugs so fast as to risk "blowout." In other words, he did not "botch" the Page execution. To the contrary, the two media witnesses both reported that the execution went like clockwork. WEBER PROTOCOL AFFIDAVIT at ¶¶ 6-10, Exhibit 3.

Moreover, evidence from a past execution, undertaken before a new protocol was in place, is insufficient to cast doubt on a state's ability and willingness to follow its new protocol. *Dickens v. Brewer,* 631 F.3d 1139, 1149 (9th Cir. 2011). There is, thus, nothing about the pusher's qualifications or past performance that precludes judgment in defendants' favor.

3. THE "POKER" WAS QUALIFIED

Dr. Heath argues that the poker South Dakota has hired in the past was not qualified because setting IV catheters was not the poker's so-called "day job." ERM A.12B requires that the poker "be certified or licensed and have at least two (2) years' professional experience as . . . [an] emergency medical technician" ERM A.12.B(B)(4), Exhibit 2. These qualifications are consistent with, and even exceed, those set in *Baze.* *Baze* approved Kentucky's requirement that the poker "have at least one year of professional experience as a[n] . . . EMT." *Baze,* 553 U.S. at 55, 128 S.Ct. at 1533; BAZE PROTOCOL at 984, Exhibit 1. Kentucky met this requirement by employing an EMT who had "daily experience establishing IV lines for inmates," but neither Kentucky's protocol, nor *Baze,* required "daily" experience. *Baze,* 553 U.S. at 55, 128 S.Ct. at 1533.

The poker who performed the Page, Robert, and Moeller executions has a bachelor's degree in health education. DEPONENT # 3 at 8/12. Prior to obtaining a bachelor's degree, he received two years of paramedic training from an accredited institution. DEPONENT # 3 at 10/3-11. That training included

setting IV lines and administering IV drugs. DEPONENT # 3 at 10/15, 11/2. The poker worked for 15 years as a field supervisor and response medic on an ambulance. DEPONENT # 3 at 12/11. Next, he worked as an ambulance response medic before assuming supervisory duties. DEPONENT # 3 at 12/19, 13/6. Currently, the poker is the fleet manager for an EMS company. DEPONENT # 3 at 11/3. His current duties require him to go out on ambulance calls and maintain his paramedic certification. DEPONENT # 3 at 18/22, 22/15. He takes 40 hours of continuing education per year to maintain his credentials. DEPONENT # 3 at 15/20.

In total, the poker has been a state certified paramedic for 29 years. DEPONENT # 3 at 14/20, 15/3, 106/4. During that time, he has set thousands of IV lines. DEPONENT # 3 at 106/4. On a scale of 1 to 100, with 1 being so easy he could do it blindfolded and 100 being the endpoint of his skills, the poker rates setting an IV line in an execution setting at 10. DEPONENT # 3 at 106/13.

The poker has performed more than 20 executions, including executions via pentobarbital. DEPONENT # 3 at 44/14. Prior to an execution, the poker inspects the drugs for expiration date, clarity, if the sterile packaging is intact, *etc.* DEPONENT # 3 at 26/4, 55/7, 70/12. 70/22. He follows standard, sterile medical practices during an execution. DEPONENT # 3 at 50/2, 71/19.

The poker has not had any complications arise in executions he has performed. DEPONENT # 3 at 41/15. He has had to set lines in inmates with

sub-optimal veins. DEPONENT # 3 at 42/4. Even so, the poker has never needed more than two or three "sticks or jabs" before successfully setting an IV line. DEPONENT # 3 at 19/17. He is trained to recognize signs of IV malfunctioning, such as swelling, leaking, or discoloration in the lines. DEPONENT # 3 at 77/7, 86/10-21, 87/14-88/25, 89/15-25, 100/7. If malfunctioning occurred in the primary line, the poker would switch to the secondary line or start another line. DEPONENT # 3 at 81/12, 87/4.

In the pentobarbital executions he has performed, the poker observed that the inmate "very quickly" becomes lethargic, goes unconscious, takes some labored respirations, then goes into respiratory arrest. DEPONENT # 3 at 45/21, 101/24. Signs of respiratory arrest are no chestwall movement, no airway sounds. DEPONENT # 3 at 46/7.

The poker follows the warden's commands during an execution, but he would not follow a command to perform an act outside the protocol. DEPONENT # 3 at 63/8, 69/15. If a stay of execution were ordered, he would immediately stop whatever it is he was doing. DEPONENT # 3 at 43/24. The poker set the IV lines for the Page execution. DEPONENT # 3 at 30/3. The poker's qualifications, training, and experience meet and exceed the minimum qualifications set by ERM A.12.B and *Baze*.

Despite his wealth of experience, Rhines argues that the poker is not qualified because he does not set currently IV lines on a "daily" basis. As noted above, *Baze* did not require *daily* practice in setting IV lines. Still, setting IV

lines remains *part* of the poker's current duties, which may entail setting IV lines on any given day if he needs to ride out on a call. DEPONENT # 3 at 18/22, 22/15. Thus, the evidence shows that the "poker" hired by the state in the past has met both ERM A.12.B's and *Baze's* qualification thresholds.

4. THE PHARMACIST IS QUALIFIED

Dr. Heath and Dr. Sellers question the state's ability to hire a pharmacist competent to compound pentobarbital. Dr. Heath's and Dr. Sellers' mock concern is simply more alarmism. The record shows that the pharmacist retained for the Robert and Moeller executions meets and surpasses minimum qualification thresholds set by *Baze.*

The pharmacist has a bachelor's degree in pharmaceutical science from an accredited institution. The program requires five years of undergraduate/graduate schooling. He receives about 20 hours per year of continuing education. DEPONENT # 1 at 25-28. The pharmacist has specialized training in sterile compounding. DEPONENT # 1 at 86.

The pharmacist is licensed and registered with the South Dakota Board of Pharmacy. In order to become licensed and registered, he had to sit for and pass a state examination. His pharmacy license and registration are current. DEPONENT # 1 at 21-22; MURDY AFFIDAVIT at ¶ 3, Exhibit 4.

The pharmacist has never been academically or professionally disciplined or arrested, has never used illegal drugs, and has never required the assistance of a mental health professional. DEPONENT # 1 at 25, 35-36. He has never

been investigated for improper compounding practices, public safety questions, or for improper handling of controlled substances. DEPONENT # 1 at 38, 57. He has more than twenty years of experience as a working compounding pharmacist. DEPONENT # 1 at 22/15, 28/5.

According to the pharmacist, compounding is a specialty within the pharmacy profession. All compounding pharmacists are general commercial pharmacists. The pharmacist operates a combined commercial and compounding pharmacy. DEPONENT # 1 at 24. Compounded drugs do not require FDA approval like commercial drugs. DEPONENT # 1 at 41, 155; MURDY AFFIDAVIT at ¶ 4, Exhibit 4. The pharmacist is a supervising pharmacist at his business who supervises several pharmacists and is responsible for quality assurance in the pharmacy. DEPONENT # 1 at 32-34.

The South Dakota Board of Pharmacy regulates the pharmacist's compounding practices. The state inspects his pharmacy annually. His pharmacy has passed inspection every year. Internally, the pharmacist performs random testing at his pharmacy to assure the potency and sterility of its product. DEPONENT # 1 at 47-48, 56, 87. His pharmacy complies with USP guidelines for sterile compounding. DEPONENT # 1 at 86, 133-35,152. His pharmacy monitors air quality, humidity, temperature, and sterility daily within its lab daily. DEPONENT # 1 at 172-73. The USP (the authoritative standard for the identity, strength, quality, and purity of compounded drugs) establishes mixing procedures that are used in his pharmacy. DEPONENT # 1

at 152, 169-70; MURDY AFFIDAVIT at ¶¶ 5-6, Exhibit 4; DEPONENT # 1 AFFIDAVIT at ¶ 1, Exhibit 5. Neither the pharmacist nor his pharmacy has never been audited by the FDA for non-compliance with federal regulations. DEPONENT # 1 at 38, 57.

The manufacturer/supplier provided a certificate of analysis for the pentobarbital used in the Robert and Moeller executions. The certificates showed that it was pure, effective, and sterile according to USP standards. DEPONENT # 1 at 117, 149; compare Exhibit 13 and SEALED EXHIBIT C with Exhibit 18. The certificate assures that the drug is what it purports to be and is safe for human use. DEPONENT # 1 at 148. It is standard in the practice of pharmacy to rely on a manufacturer/supplier's certificate of analysis and not double-check a certificate's accuracy. DEPONENT # 1 at 185; MURDY AFFIDAVIT at ¶ 7, Exhibit 4.

Pentobarbital is used for both humans and animals; the formula does not differ with the concentration. The compounding process for human or animal pentobarbital is absolutely the same. DEPONENT # 1 at 130, 152. The 6.5% solution formula that accompanied the pentobarbital from the manufacturer/supplier is for human or veterinary use. DEPONENT # 1 at 130-32, 153. The dosage, not the concentration, of pentobarbital determines what is suitable for human use. DEPONENT # 1 at 153. Non-pharmaceutical grade pentobarbital may not be used on either humans or animals. DEPONENT # 1 at 22; DEPONENT # 1 AFFIDAVIT at ¶ 2, Exhibit 5. The pentobarbital acquired

for use in Robert's and Moeller's executions was a pharmaceutical grade product. DEPONENT # 1 AFFIDAVIT at ¶ 1, Exhibit 5. The pharmacist could provide a package insert for the compounded pentobarbital if one were needed. DEPONENT # 1 at 160; MURDY AFFIDAVIT at ¶ 14, Exhibit 4; DEPONENT # 1 AFFIDAVIT at ¶ 11, Exhibit 5.

Pentobarbital powder can be stored at room temperature. DEPONENT # 1 at 110, 141. Once compounded into a serum, the pharmacist packaged the injectable serum in rubber-tipped sterile glass vials customarily used for drawing the solution out of the vial with a needle. DEPONENT # 1 at 142. The pharmacist ensured that the compounded pentobarbital serum was transported to the penitentiary in a cooler, just as he ordinarily does when he transports drugs that require refrigeration from the pharmacy to the customer. DEPONENT # 1 at 156-57; DEPONENT # 1 AFFIDAVIT at ¶ 12, Exhibit 5. Compounded pentobarbital serum should be a clear liquid. DEPONENT # 1 at 115. Sterility or bacterial endotoxin testing is not required for pentobarbital that is refrigerated and used within 24 hours of compounding. DEPONENT # 1 at 158-59.

The propylene glycol called for in the compounding formula is a solvent that also helps preserve the compounded pentobarbital. DEPONENT # 1 at 139, 144. The pH balance helps the powder remain suspended in the solution so it does not settle in the bottom of the vial and, therefore, require shaking before use. DEPONENT # 1 at 144-45; MURDY AFFIDAVIT at ¶ 11, Exhibit 4;

DEPONENT # 1 AFFIDAVIT at ¶ 10, Exhibit 5. The pharmacist obtained the compounding formula from the manufacturer/supplier around the time the pharmacy purchased the drugs. DEPONENT # 1 at 146-48. It is a simple formula. DEPONENT # 1 at 148. The pharmacist used a triple failsafe during the compounding process to assure that the final formula contained the proper concentration of pentobarbital: weigh the bottle before extracting the amount needed, weigh the amount extracted, and then reweigh the bottle after extraction to assure that it is lighter by the amount extracted. DEPONENT # 1 at 148-49, 159.

On a scale of 1-100, with one being utterly routine and simple and 100 being highly complex, the simplicity of compounding pentobarbital according to the formula falls at 15. DEPONENT # 1 at 185. The pharmacist describes the mixing process as "easy" for a person with his training and experience. DEPONENT # 1 at 185.

As in *Baze,* ERM A.12.B's combined qualification threshold and incorporated standards safeguard against any risks associated with compounding error. The record reflects that the pharmacist hired for Robert and Moeller's execution met, and exceeded, the requisite experience and qualifications set by ERM A.12.B. ERM A.12.B adopted USP 797's compounding standards to further safeguard condemned inmates. Any further risk associated with compounding would arise purely from "risk of accident," which is not a risk of constitutional dimension.

5. RESPONDENT HAS ADHERED TO THE PROTOCOL

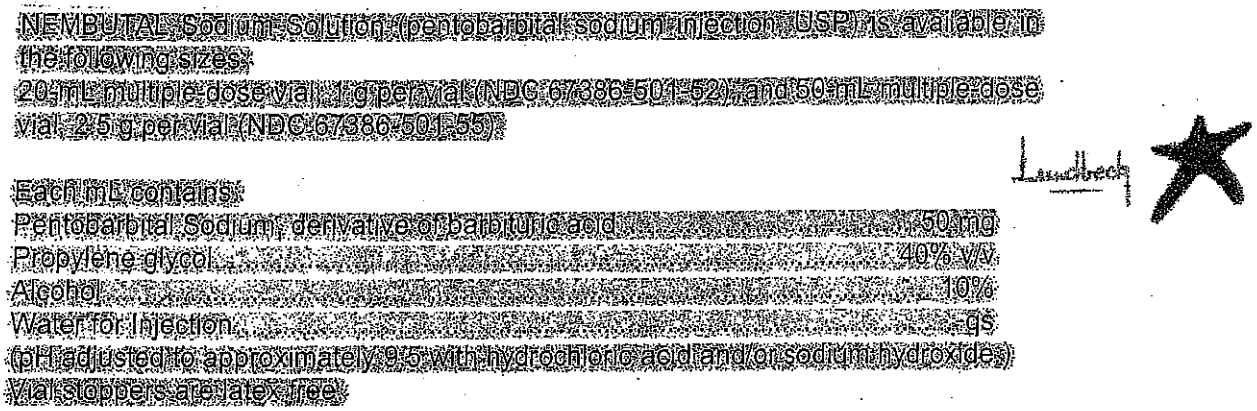
Dr. Heath's and Dr. Sellers' affidavits cite various ways by which the state allegedly deviated from its protocol during the Robert and Moeller executions. Rhines asserts that these alleged deviations are grounds for speculating that the state will fail to implement its protocol in the future. Rhines' cannot show a probable risk of future harm because what he claims are "deviations" are merely argumentative distortions of testimony or misinterpretations of the protocol. The evidence shows that the state has not deviated from its protocol.

i. Alleged Use Of A 65 mg/ml Solution Instead Of A 50 mg/ml Solution

Because the manufacturer/supplier supplied a formula for a 65 mg/ml solution, Dr. Heath and Dr. Sellers claim that the state used this concentration during the Robert and Moeller executions in lieu of the protocol's 50 mg/ml concentration. Their claims are unfounded.

Respondent testified that he would not use a 65 mg/ml concentration during the Robert or Moeller executions and the state did not do so. DEPONENT # 4 at 47/19, 49/23, 51/24; DEPONENT # 1 AFFIDAVIT at ¶ 4, Exhibit 4. According to Dr. Heath, however, using a 50 mg/ml concentration was either a deviation from the formula or a deviation from the protocol. It is neither.

The manufacturer/supplier's formula calls for the desired concentration of pentobarbital sodium to be mixed with 40 ml of propylene glycol, 10 ml of alcohol, hydrochloric acid sufficient to balance to a pH of 9.5, and a sufficient quantity (qs) of sterile water for injection to bring the mixture to 100 ml. SEALED EXHIBIT B; DEPONENT # 1 AFFIDAVIT at ¶ 10, Exhibit 5. Comparing this formula with the formula used by Lundbeck to manufacture injectable pentobarbital serum from powder reveals that the formulations for creating a 65 and 50 mg/ml solutions are the same.



NEMBUTAL Sodium Solution (pentobarbital sodium injection, USP) is available in the following sizes:
20 mL multiple dose vial, 1 g per vial (NDC 67386-501-52), and 50 mL multiple dose vial, 2.5 g per vial (NDC 67386-501-55)

Each mL contains:
Pentobarbital Sodium, derivative of barbituric acid ..... 50 mg
Propylene glycol ..... 40% v/v
Alcohol 10%
Water for Injection ..... qs
(pH adjusted to approximately 9.5 with hydrochloric acid and/or sodium hydroxide)
Vial stoppers are latex free.

Lundbeck

FIGURE 1: Lundbeck Formula

Like the manufacturer/supplier's formula, Lundbeck compounds pentobarbital sodium using the identical 40 ml (or 40% of 100 ml) of propylene glycol, 10 ml of alcohol, hydrochloric acid to balance the pH to 9.5, and a quantity of sterile water for injection sufficient to bring the mixture to 100 ml. LUNDBECK FORMULA, Exhibit 17; MURDY AFFIDAVIT at ¶ 10, Exhibit 4; DEPONENT # 1

AFFIDAVIT at ¶¶ 9, 10, Exhibit 5. Thus, compounding the state's powder into a 50 mg/ml concentration solution was neither a deviation from the formula nor a deviation from the protocol.

ii. Lack Of A Poker Qualified To Set A Central Line

Dr. Heath's affidavit complains that the poker was not qualified to set a central line. Dr. Heath is unaware that respondent has testified that he had no intention of setting a central line, nor was a central line set in either the Robert or Moeller executions. WEBER 1OCT12 AFFIDAVIT at ¶ 3, Exhibit 6. The protocol does not require the state to set a central line, or to hire a poker proficient in doing so. ERM A.12.B.D.8, Exhibit 2. Therefore, the state's hiring of a poker who will set IV lines only in peripheral veins did not deviate from the protocol.

iii. Lack Of A Qualified Pusher

Dr. Heath's affidavit complains that state deviated from its protocol by not hiring a qualified pusher. As discussed above, however, the pusher was qualified. Therefore, the state did not deviate from its protocol by hiring this particular pusher.

iv. Proceeding Without A Second Independent Line

Dr. Heath's affidavit complains that the warden might proceed with his execution if the poker were unable to establish a backup line in his left arm. While true, Dr. Heath incorrectly argues that this is a constitutional problem. First, the warden testified that he would proceed with no more than a single

line *only* if the poker assured him it was a good line. DEPONENT # 4 at 88/20, 89/1. Second, *Taylor* specifically ruled that proceeding with a single line was permissible if "the prisoner's physical condition prevents the use of two lines." *Taylor,* 487 F.3d at 1083. Third, use of a single, primary line would not prevent completion of the execution if the primary line failed as Dr. Heath suggests. If the primary line failed at the initial site in one arm, the poker can start another line in a nearby site on the same arm or in the hand or foot. DEPONENT # 3 at 87/10. Finally, South Dakota has never performed an execution with a single line. Thus, the record does not support Rhines' claim that the state has a record of deviating from its protocol by performing executions with a single line.

v. Alleged Lack Of Manufacturer's Instructions

Dr. Heath argues that the lack of "manufacturer's instructions" for the pentobarbital sodium used in the Robert and Moeller executions was a deviation from the protocol. This might have been be true if the term "manufacturer's instructions" as used in the protocol has the same meaning that it does to Dr. Heath. Dr. Heath interprets the term as it is used in the context of commercially manufactured drugs. In that context, the term means the printed instructions provided by the commercial manufacturer, a.k.a the "package inserts" that are compiled and reprinted in the Physician's Desk Reference. WEBER 1OCT12 AFFIDAVIT at ¶ 5, Exhibit 6.

The component active ingredients of compounded drugs are not commercially manufactured "drugs" for which "manufacturer's instructions" are required by law. MURDY AFFIDAVIT at ¶ 14, Exhibit 4. They are chemical components of what becomes a "drug" after it is compounded with USP-prescribed reagents.

Since the protocol does not require the use of commercially-manufactured drugs, the term has a broader meaning in the protocol. In this broader context, the term means whatever instructions accompany the drug from the compounder (or "manufacturer" if you will). In this case, those documents are the certificate of analysis, the manufacturer/supplier's mixing formula, and any other instructions or package materials the compounder may supply. DEPONENT # 1 at 160/2; DEPONENT # 1 AFFIDAVIT at ¶ 1, Exhibit 5. The manufacturer/supplier's formula provides storage instructions (refrigerate after compounding, use within 30 days). There is, thus, no deviation from the protocol simply because the term "manufacturer's instructions" means something different to Rhines' expert than what it means to the state.

vi. Alleged Inability To Monitor Left Backup Line

Dr. Heath claims that performing the execution remotely from a separate room creates unacceptable risks, such as the alleged inability to monitor the backup IV line. This is incorrect. The current protocol requires that the IV team "establish and secure the IV lines in such a way as to leave them visible

for monitoring." ERM A.12.B(D)(8), Exhibit 2. In other words, so that they are not covered by a sheet as they were during Page's execution. Thereafter, the IV team "monitor[s] IV functioning from within the chemical room." ERM A.12.B(D)(12), Exhibit 2.

Baze does not require that the IV team be in a position to view every inch of the backup line, or even the backup IV site itself. According to *Baze,* the IV team can monitor the line's flow by keeping an eye on the visible portions of the lines in the execution room and on the IV bag's drip chamber (which is in the chemical room), while the "warden [is] in the execution chamber . . . watch[ing] for signs of IV problems, including infiltration." *Baze,* 553 U.S. at 56, 128 S.Ct. at 1534; DEPONENT # 3 at 73/6-19, 85/24, 88/16, 99/19. *Baze* noted that discomfort from injecting drugs into tissue and swelling are signs of IV malfunction that would be "obvious" to the warden. *Baze,* 553 U.S. at 60, n. 6, 128 S.Ct. 1537. Furthermore, the pentitentiary pivoted the gurney so that both the left and right arms are visible to the poker and pusher in the chemical room. WEBER 1OCT12 AFFIDAVIT at ¶ 4, Exhibit 6. Accordingly, Dr. Heath fails to demonstrate a deviation from either the protocol or constitutional standards by having the execution performed from an adjacent room.

vii. Attendance At Practice Sessions

Dr. Heath complains that the poker and pusher did not participate in the all of the drills that preceded the Robert and Moeller executions. This is not a protocol deviation because the drills are for "SDDOC staff," which the poker

and pusher are not. ERM A.12.B(D)(1), Exhibit 2. Nevertheless, the warden required the poker and pusher to drill before the execution. DEPONENT # 4 at 82/5. While the poker and pusher at issue in *Baze* participated in 10 drills during the course of the entire year (not in relation to a single execution), *Baze* does not impose that requirement as a matter of law. Where, as here, the poker sets IV lines numerous times per year as part of his day job, he no more needs ten practice drills to set an IV line in a given inmate than Dr. Heath needs ten practice drills to anesthetize a given patient. HEATH *COOEY* TESTIMONY at 36, Exhibit 9 (EMT's are "extremely good" at setting IV lines). The state has not deviated from its practice drill protocol.

viii. "Veterinary" Drug

Dr. Sellers accuses the SDDOC of having used a "veterinary" pentobarbital during the Robert and Moeller executions, as if there is something wrong with that. According to Dr. Heath, there is no difference. "[C]ats, dogs, horses, elephants are put to sleep using [a] lethal injection of pentobarbital." HEATH *COOEY* TESTIMONY at 17, Exhibit 9. "Zoos" use pentobarbital to euthanize "gorillas" and "elephants;" pentobarbital helps euthanize "beached whales." HEATH *COOEY* TESTIMONY at 17, Exhibit 9. According to Dr. Heath, "[w]hat works for all other vertebrate animals . . . is going to work in human beings also." HEATH *COOEY* TESTIMONY at 40, Exhibit 9; DEPONENT # 1 at 131/19. Alas, Dr. Heath pines, if only states "were to use a veterinary standard of lethal injection," then "there would be no

litigation, or at least [he] would not participate" in it. Or, if he did, he "would work for your [the state's] side to say that I think this is a safe and humane procedure." HEATH *COOEY* TESTIMONY at 40, Exhibit 9.

Veterinarians use compounded pentobarbital from the state's manufacturer/supplier all day long every day to humanely euthanize animals. SEALED EXHIBIT F. The pharmacist in this case has compounded pentobarbital for veterinarians without incident or complaint from any of his veterinary doctor clients. DEPONENT # 1 at 34/13, 37/8, 54/21. The pentobarbital sodium in question is very obviously not "veterinary" because it is 99.2% pure, whereas "veterinary" pentobarbital need only be 97% pure. Compare MILLER AFFIDAVIT at ¶ III, Exhibit 11, with REDACTED CERTIFICATES OF ANALYSIS, Exhibit 13 and SEALED EXHIBIT C; MURDY AFFIDAVIT at ¶ 8, Exhibit 4 (Pentobarbital Sodium monograph at 2899). Thus, even if pentobarbital serves double duty as an animal drug, Dr. Heath concedes that "veterinary practice" is the gold standard for euthanizing all vertebrates, humans included. It seems that what's good for man's best friends is good for man's worst foes. Using "veterinary" pentobarbital is not a protocol deviation so long as it is a pharmaceutical grade product, as the drug use in the Robert and Moeller executions was.

ix. The State's Alleged "Reckless" Handling And Storage Of Pentobarbital Bottles

Dr. Sellers alleges that the state's "possession of a previously opened container" of pentobarbital sodium was the most "reckless and haphazard" thing she has ever seen. SELLERS AFFIDAVIT at 18(C). Dr. Sellers is mistaken. The state has not opened any bottles of pentobarbital sodium and does not possess any opened bottles. The bottles in the state's possession all retain their factory seals. WEBER 1OCT12 AFFIDAVIT at ¶6, Exhibit 6. The seals for the drugs used in Robert's and Moeller's executions were not broken by anyone but the pharmacist. WEBER 1OCT12 AFFIDAVIT at ¶ 6, Exhibit 6. Sealed bottles stored according to manufacturer/supplier instructions are protected from degradation or contamination. MURDY AFFIDAVIT at ¶ 8, Exhibit 4; DEPONENT # 1 AFFIDAVIT at ¶ 8, Exhibit 5. Thus, Dr. Sellers has no credible claim that the state's handling of pentobarbital in prior executions deviated from its protocol

x. The API Is "Contaminated"

Dr. Sellers claims there were "contaminants" in the pentobarbital sodium used in the Robert and Moeller executions. The certificates of analysis report, however, that the "contaminants" in the powder were within the allowable levels for pentobarbital sodium for injection set by the USP. The certificates reflect that the bacterial and fungal counts in the pre-compounded powder were "50 cfu/g max)," below the permitted range of "<300 cfu/g max," and the

bacterial endotxins were at the permitted limit of "<0.8 eu/mg max." Compare REDACTED CERTIFICATES OF ANALYSIS, Exhibit 13 and SEALED EXHIBIT C with USP PENTOBARBITAL MONOGRAPH, Exhibit 18 at 2901; MURDY AFFIDAVIT at ¶¶ 9, 11, 13, Exhibit 4; DEPONENT # 1 AFFIDAVIT at ¶ 2, Exhibit 5

As Dr. Dershwitz points out, the contaminants found in the pre-compounded powders are removed through filtration or other sterilization processes during compounding. DERSHWITZ 18SEP12 AFFIDAVIT at ¶ 10(a), Exhibit 19; SEALED EXHIBIT D (0.22 micron filter used to remove contaminants); MURDY AFFIDAVIT at ¶ 13, Exhibit 4; DEPONENT # 1 AFFIDAVIT at ¶ 3, Exhibit 5. Thus, the final compounded product's bacterial and fungal levels dropped to zero and bacterial endotoxin level dropped to "0.48 eu/ml," all within permitted ranges. WEBER MOELLER AFFIDAVIT, Exhibit 12.

Pre-compounded bulk drug ingredients contain contaminants. This is not shocking. DEPONENT # 1 AFFIDAVIT at ¶ 3, Exhibit 5. It is certainly not news to someone experienced in compounding like Dr. Sellers. Yet, Dr. Sellers neglects to inform the court that ordinary compounding removes these contaminants. Dr. Sellers is not helping the court, as an expert must under SDCL 19-15-2 (Rule 702), if she only tells the court a part of the story. In any event, Dr. Sellers' concerns regarding "contaminants" in the pre-compounded, pre-sterilized bulk ingredient are laid to rest by the post-compounding testing

that shows that the drug used in the Robert and Moeller execution passed with flying colors. WEBER MOELLER AFFIDAVIT at ¶ 6, Exhibit 12.

xi. Pharmacist Violated State Law

Dr. Sellers graciously provides the court with her esteemed legal opinion that compounding pentobarbital sodium for use in the Robert and Moeller executions violated South Dakota law. SELLERS AFFIDAVIT at 17(4). It seems that Dr. Sellers, like Dr. Heath, is an all-purpose medical, legal, and constitutional expert. But, Dr. Sellers' legal opinions are just as goofy as Dr. Heath's.

SDCL 23A-27A-32 permits a pharmacist to "dispense" lethal injection drugs without a prescription. Statutes applicable to compounding pharmacists define dispensing as "the preparation and delivery of a drug" and compounding as "the preparation" of a drug. SDCL 36-11-1(5), (7). Reading the two statutes together reveals that "dispense" as used in SDCL 23A-27A-32 contemplates both the "preparation" and "delivery" of the drug as defined in SDCL 36-11-1(5) and (7). Moreover, SDCL 23A-27A-32 expressly states that pharmacists may dispense lethal injection drugs without a prescription "notwithstanding any other provision of law," which means that it is the dominant statute. Dr. Sellers should stick to her field of expertise.

Because Dr. Heath's and Dr. Sellers' list of alleged deviations are imaginary, they fail to demonstrate the state's inability or unwillingness to adhere to its written protocol when the time comes to execute Rhines. *Dickens,*

631 F.3d at 1149. Their imaginary disaster scenarios are also inconsistent with the flawless executions of Robert and Moeller performed by the state. According to respondent, witnesses, Dr. Heath, and Dr. Dershwitz, the drug performed as expected and delivered painless and humane deaths to the condemned inmates. WEBER ROBERT AFFIDAVIT at ¶¶ 2-4, Exhibit 21; WEBER MOELLER AFFIDAVIT at ¶¶ 2-5, Exhibit 12. Far from exposing deviations from the protocol, the record reveals a scrupulous commitment on the part of state officials to formulate a state-of-the-art-protocol, and to strictly adhere to it during executions. Our venerable constitution, and basic humanity, require nothing less.

E. Rhines Erroneously Claims That SDCL 23A-27A-32 Is An Unconstitutional *Ex Post Facto* Law Or Bill Of Attainder

Rhines alleges that SDCL 23A-27A-32 is an invalid, *ex post facto* law or an unconstitutional bill of attainder. SDCL 23A-27A-32 meets none of the elements of either an *ex post facto* law or a bill of attainder.

1. SDCL 23A-27A-32 Is Not An *Ex Post Facto* Law

Rhines claims that SDCL 23A-27A-32 is an unconstitutional *ex post facto* law because it allegedly adopted a different method of execution by lethal injection than existed at the time of Rhines' conviction. "[T]wo critical elements must be present for a criminal or penal law to be *ex post facto:* it must be retrospective, that is, it must apply to events occurring before its enactment,

and it must disadvantage the offender affected by it." *Weaver v. Graham,* 450 U.S. 24, 30, 101 S.Ct. 960, 964 (1981).

Rhines' *ex post facto* claim cannot satisfy either element. First, SDCL 23A-27A-32 is not retrospective. In *Arkansas Dept. of Corr. v. Williams,* --- S.W.3d ---, 2009 WL 4545103 (Ark. 2009), an inmate challenged a statutory amendment changing how Arkansas promulgated its execution protocol as an *ex post facto* law. The *Williams* court observed that "a statute does not operate 'retrospectively' merely because it is applied in a case arising from conduct antedating the statute's enactment." *Williams,* 2009 WL 4545103 at *9, citing *Landgraf v. USI Film Products,* 511 U.S. 244, 269 (1994). The *Williams* court determined that the amendment was not retrospective because it applied (logically) only prospectively to executions held after the amendment. *Williams,* 2009 WL 4545103 at *9. As in *Williams,* SDCL 23A-27A-32 is prospective in that it applies only to future executions, Rhines' included.

Second, SDCL 23A-27A-32 does not disadvantage Rhines. SDCL 23A-27A-32 "did not change the penalty – death – for murder, but only the mode of producing" death. *Malloy v. State of South Carolina,* 237 U.S. 180, 185, 25 S.Ct. 507, 509 (1915). Certainly, defendants' adoption of the one-drug, pentobarbital protocol pursuant to SDCL 23A-27A-32 creates no risk of "increasing" Rhines' pain or punishment. If anything, respondents' one-drug protocol decreases Rhines' risk of pain because it removes the drugs that can cause excruciating pain that were called for in earlier protocols. *Brown v. Vail,*

237 P.3d 263, 272-73 (Wash. 2010). Thus, SDCL 23A-27A-32 is not an *ex post facto* law because Rhines' "punishment was not increased." *Malloy*, 237 U.S. at 185, 25 S.Ct. at 509.

The fact that SDCL 23A-27A-32 is not *ex post facto* is manifestly proven by the recent decision in *Williams v. Hobbs*, 658 F.3d 842 (8th Cir. 2011). In *Hobbs*, a group of Arkansas death row inmates, like Rhines, complained that Arkansas' adoption of a statute like South Dakota's was *ex post facto* because it did not expressly mandate use of an anesthetic as an earlier version of the statute had. The *Hobbs* court found no *ex post facto* violation because the protocol adopted pursuant to the new statute retained the use of an anesthetic. As in Arkansas, South Dakota's protocol retains the use of an anesthetic, even though SDCL 23A-27A-32 does not specify it. The same conditions that led the *Hobbs* court to reject the inmates' *ex post facto* theories in Arkansas exist in this case. Rhines, therefore, similarly fails to state a viable *ex post facto* claim in this case.

2. SDCL 23A-27A-32 Is Not A Bill Of Attainder

Rhines claims that SDCL 23A-27A-32 is an unconstitutional bill of attainder because it subjects him to a different method of execution by lethal injection than existed at the time of his sentencing. A bill of attainder is a legislative act that inflicts punishment on a specific person or members of a specific group for an alleged crime without a judicial trial. *United States v. Lovett*, 328 U.S. 303, 315, 66 S.Ct. 1073, 1078 (1946). Article I, Sections 9

and 10 of the United States Constitution prohibit congress or the state legislatures from enacting bills of attainder. Article VI, Section 22 of the South Dakota Constitution also proscribes bills of attainder.

Before a law may be termed a "bill of attainder" it must: (1) specify the affected person(s); (2) impose punishment; and (3) deny a judicial trial. SDCL § 23A-27A-32 meets none of these criteria.

For example, in *Langford v. Day,* 134 F.3d 1381 (9th Cir. 1998), a death row inmate attacked a statute switching Montana's method of execution from hanging to lethal injection as a bill of attainder. The *Langford* court ruled that the change in the method of execution was not a bill of attainder. First, the statute lacked the requisite specificity because it applied generally to "all persons under sentence of death, now and in the future." Second, the court ruled that abolishing hanging and adopting lethal injection in its place "imposed no punishment." Finally, Langford had not been denied a judicial trial because he had been "convicted and sentenced to death by a court." *Langford,* 134 F.3d at 1382. Accordingly, the *Langford* court determined there had "been no attainder." *Langford,* 134 F.3d at 1382.

Langford's reasoning is equally applicable to Rhines' bill of attainder challenge. SDCL § 23A-27A-32 merely modified the method of lethal injection for inmates convicted after July 1, 2007, though the change from a two-drug to a one-, two-, or three-drug protocol was minor by comparison to Montana's wholesale shift from hanging to lethal injection.

SDCL § 23A-27A-32 does not meet the specificity requirement for a bill of attainder because it does not name Rhines or any other particular condemned inmate. Instead, the statute broadly applies to persons subject to death sentences now and in the future. *Langford,* 134 F.3d at 1382.

SDCL § 23A-27A-32 also does not meet the punishment requirement. The statute does not impose the punishment of death, it merely prescribes the manner in which the previously imposed death sentence will be carried out. *Langford,* 134 F.3d at 1382.

Finally, SDCL § 23A-27A-32 does not meet the lack-of-judicial-trial factor because Rhines' death sentence was not imposed legislatively by statute but by a jury after a judicial trial. *Langford,* 134 F.3d at 1382. Having failed to demonstrate that SDCL § 23A-27A-32 meets the requisite elements, Rhines is not entitled judgment on his bill of attainder claim. *Langford,* 134 F.3d at 1382.

3. Rhines Must Serve His Death Sentence Because The Death Penalty Has Not Been Declared Unconstitutional

Rhines argues that this court must convert his death sentence to life imprisonment allegedly because South Dakota's method of execution is unconstitutional. Rhines' argument is premised on a misreading of SDCL 23A-27A-14, which mandates converting a death sentence to life imprisonment if "the death penalty for a Class A felony is held to be unconstitutional." SDCL 23A-27A-14 does not mandate converting a death sentence to life

imprisonment if a particular method of execution is found unconstitutional, only if the death penalty itself, in relation to a particular kind of Class A felony, is found unconstitutional.

The death penalty and its means of infliction survive constitutional challenge so long as they comport with contemporary standards of decency, are proportionate to the crime committed, and serve a legitimate penological objective. *Moeller v. Weber,* 1996 SD 60, ¶ 106, 548 N.W.2d 465, 489 (S.D. 1996)(*Moeller I*). *Moeller I* concluded that South Dakota's capital punishment scheme meets these requirements based on public acquiescence of the punishment and the penological purpose of punishing the "most extreme crimes" and deterring capital offenders. *Moeller I,* 1996 SD 60 at ¶¶ 106-07, 548 N.W.2d at 489.

In *Moeller II,* the court held that the constitutionality of capital punishment in South Dakota as applied to Class A, first-degree murder had been sufficiently resolved by its earlier precedent that the court declined to address Moeller's continuing challenge. *Moeller v. Weber,* 2000 SD 122, ¶ 176 n.18, 616 N.W.2d 465, 463 (S.D. 2000). Thus, it is clearly established in this state that neither the death penalty *per se,* nor lethal injection as a means of inflicting it, are an unconstitutional punishment for Class A, first-degree murder. *State v. Piper,* 2006 SD 1, ¶ 24, 709 N.W.2d 783, 797 (S.D. 2006).

Rhines is not entitled to a life sentence because the death penalty, and lethal injection as a means of inflicting that penalty, remains constitutional for

the Class A felony he committed. *Piper,* 2006 SD 1 at ¶ 24, 709 N.W.2d at 796. Accordingly, Rhines' death sentence stands.

CONCLUSION

Rhines' claims and evidence fail to carry his "heavy burden" of showing that South Dakota's protocol is "cruelly inhumane" as written or as implemented. *Baze,* 553 U.S. at 52, 129 S.Ct. at 1532. Dr. Heath's methodology consists purely of speculation, while his "medical" opinions consist purely of opining that *Baze* got it all wrong. His "expert" opinions have not garnered acceptance by the nation's judiciary. Since Dr. Heath's opinions are of no value to this court, they do not create a scientific basis for entering judgment in Rhines' favor.

Contrary to Dr. Heath's and Dr. Sellers' s brand of the-sky-is-falling alarmism, the state has performed past executions consistent with it protocol and constitutional standards. The state purchased its pentobarbital from an FDA-licensed, domestic manufacturer/supplier. Though not required by USP standards, the state hired an independent lab to test the compounded solution for purity, potency, and sterility prior to its use. The drug passed. The qualifications of the poker and pusher who performed the Robert and Moeller executions met or exceeded those required by *Baze* and the SDDOC's protocol.

Rhines subjected Donnivan Schaeffer to pain and terror before taking his life for a paltry sum of money. Rhines is a sociopath who poses a continuing danger to penitentiary personnel. JOHNSON DEPOSITION, Exhibit 22;

FRANKS REPORT, Exhibit 23; SCHACHT REPORT, Exhibit 24. Though the state is not blameless in the two-decade delay attending Rhines' execution, the day Rhines is made to take the walk he took Donnivan Schaeffer on is overdue. The State of South Dakota respectfully requests that judgment be entered in its favor on all of Rhines' claims so that Donnivan Schaeffer can finally rest assured that Rhines has paid the ultimate penalty for the ultimate crime.

Dated this 14th day of December 2012.

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this 14th day of December 2012 a true and correct copy of the foregoing trial brief re: petitioner's method of execution challenges was served by United States mail, first class, postage prepaid, on Neil Fulton, Federal Public Defender, 101 South Pierre Street, Pierre, SD 57501.

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